

NOTES ON GEOGRAPHIC DISTRIBUTION

**Amphibia, Anura, Leptodactylidae, *Leptodactylus fragilis*:  
Distribution extension, Colombia**

Javier Mendez-Narvaez <sup>1</sup>  
Jhon Jairo Ospina-Sarria <sup>1</sup>  
Wilmar Bolivar-G. <sup>2</sup>

<sup>1</sup> Student of academic program of Biology from the Universidad del Valle, Cali-Colombia.  
A. A. 25360, Cali, Colombia. E-mail: javier0620@gmail.com

<sup>2</sup> Research group Laboratorio de Herpetología. Universidad del Valle, Cali-Colombia. Departamento de Biología.  
A. A. 25360, Cali, Colombia.

*Leptodactylus fragilis* (Brocchi, 1877) was described on the basis of a female collected in Tehuantepec, Mexico. Main diagnostic characters of the species are the lack of a pair of distinct, continuous dorsolateral folds; the toes either lacking or having very weakly developed lateral ridges and basal webbing; the dorsal surface of the shank usually being covered with many white tubercles; the posterior surface of the tarsus either having many white tubercles or being smooth; the sole of the foot having many white tubercles; and the male vocal sacs being laterally expanded with a dark pigmentation. Although there are considerable morphological similarities with *L. caatingae* and *L. latinasus*, the three species have

distinct vocalizations (Heyer et al. 2006) and their ranges do not overlap.

*Leptodactylus fragilis* has been the subject of continued taxonomic controversy for more than fifty years, as to whether the correct name is *L. fragilis* or *L. labialis* (Heyer 2002). In Colombia, the taxon has been reported as *L. fragilis* by Ruiz-Carranza et al. (1996), Renjifo and Lundberg (1999) and Bernal et al. (2000). Later, Acosta-Galvis (2000), Cuentas-Montalvo et al. (2002), Paez et al. (2002) and Lynch and Suarez-Mayorga (2004) reported the species as *L. labialis*. Recently, Heyer et al. (2006) reported this species in Colombia with the name of *L. fragilis*.



Figure 1. Specimen of *Leptodactylus fragilis* from Caloto, Vereda Morales, Cauca, Colombia. Photo by W. Bolívar.

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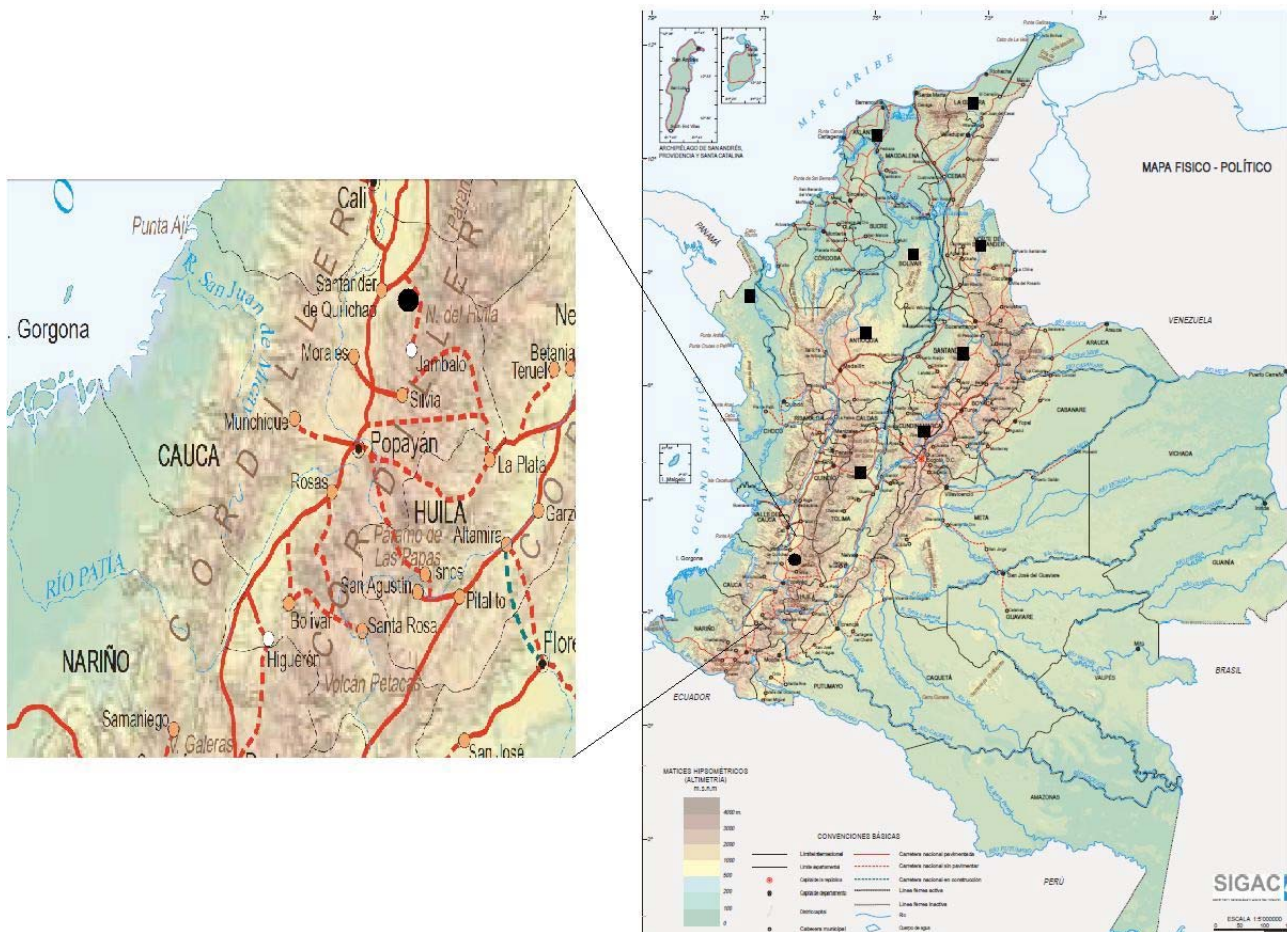


Figure 2. Right: Map of Colombia showing historical locations (black square) and the new localities for *Leptodactylus fragilis* (black dots). Left: Map of the enlarged areas showing the Department of Cauca with the exact locality where the specimens were collected (black dots), corresponding to *vereda* Morales, municipio Caloto. Map from IGAC (<http://www.ssiglims.igac.gov.co/wps/portalmapascolombia>)

*Leptodactylus fragilis* is distributed from Texas in the United States of America, throughout Mexico and Middle America to northern and west - central Colombia and Venezuela (Heyer 2002; Heyer et al. 2006). In Colombia, *L. fragilis* was previously known in the departments of Norte de Santander, Santander, La Guajira, Cundinamarca, Magdalena, north of Chocó, Antioquia, Tolima, Bolívar and Atlántico (Heyer 1978; Renjifo and Lundberg 1999; Bernal et al. 2000; Cuencas-Montalvo et al. 2002; Paez et al. 2002).

Between October 2006 and March 2007 specimens of *Leptodactylus fragilis* (Figure 1), *Dendropsophus columbianus* (Boettger, 1892) and

*Leptodactylus colombiensis* (Heyer, 1994) were collected in the department of Cauca, Vereda Morales, municipality of Caloto, Colombia (02°59'49.1" N, 76°24'25.2" W: 1300 m elevation) (Figure 2).

We collected specimens of *Leptodactylus fragilis* in the habitat shared with another leptodactylid frog, *L. colombiensis*. The latter is larger than *L. fragilis*, has two medial black thumb spines, and has distinctive fringes on the toes (Heyer 1994). Moreover, we found *L. fragilis* to be more abundant than *L. colombiensis* in drier areas, whereas the latter was common in swampy areas.

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We herein thus report on the first record for *L. fragilis* in the department of Cauca in Colombia and the southernmost record in the Rio Cauca Valley, based on the identification of 20 adult specimens; 15 females (SVL mean 35.7 mm) and 5 males (SVL mean 36.2 mm). The specimens

were deposited in the *Museo de Herpetología* at the *Universidad del Valle*, Cali-Colombia (UV-C 15672-15686) and in the collection of Docencia (CD-UV 1601-1605), Zoology section, both in Cali, Colombia.

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